

REMARKS

Claims 1 through 7 and 9, 10, and 12 through 31 are currently pending in the application.

Claims 8 and 11 have been canceled.

Claims 13 through 31 are withdrawn from consideration as being directed to a non-elected species of invention.

This amendment is in response to the Office Action of July 11, 2005.

35 U.S.C. § 102(b) Anticipation Rejections

Anticipation Rejection Based on Tieber (U.S. Patent 6,187,654)

Claims 1 through 7 were rejected under 35 U.S.C. § 102(b) as being anticipated by Tieber (U.S. Patent 6,187,654).

A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference. *Verdegaal Brothers v. Union Oil Co. of California*, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). The identical invention must be shown in as complete detail as is contained in the claim. *Richardson v. Suzuki Motor Co.*, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989).

Applicants assert that the Tieber reference does not and cannot anticipate the claimed invention of presently amended independent claim 1 under 35 U.S.C. § 102 because the Tieber reference does not identically describe, either expressly or inherently, each and every element of the claimed invention in as complete detail as contained in the claim.

After carefully considering the cited prior art, the rejections, and the Examiner's comments, Applicants have amended the claimed invention to clearly distinguish over the cited prior art.

Turning to the cited prior art, the Tieber reference describes an arrangement to support a substrate during a dicing process. The arrangement includes a nest having a first nest side and a second nest side. The nest includes a grid which defines at least one nest opening. The nest opening has an opening area that is smaller than an area of a die diced from the substrate. The arrangement further includes a vacuum retainer plate having thereon at least one vacuum pedestal. The vacuum pedestal protrudes above the first nest side of the nest when the vacuum

pedestal is disposed through the nest opening from the second nest side to support the substrate on the upper surface and lift the substrate off the first nest side when the substrate is positioned on the nest with the first substrate side facing the first nest side and when the nest is mated with the vacuum retainer plate.

The claimed invention of presently amended independent claim 1 is directed to “[t]he combination of a semiconductor substrate singulation saw and a chuck for holding a substrate comprising . . . a support; a saw attached to the support, the saw having at least two blades supported above a table by the support and oriented to cut mutually parallel paths in a surface of a semiconductor substrate positioned on the table, at least one of the saw blades horizontally translatable on said support and the other saw blade having a fixed horizontal position on said support; and a chuck having at least one cutting pedestal located thereon mounted on the table, the chuck for holding the substrate during cutting thereof by the saw, the chuck translatable in a horizontal direction and a transverse direction in relation to the saw.”

Applicants assert that the Tieber reference does not identically describe the elements of the claimed invention of presently amended independent claim 1 calling for “a support; a saw attached to the support, the saw having at least two blades supported above a table by the support and oriented to cut mutually parallel paths in a surface of a semiconductor substrate positioned on the table, at least one of the saw blades horizontally translatable on said support and the other saw blade having a fixed horizontal position on said support” and “a chuck having at least one cutting pedestal located thereon mounted on the table, the chuck for holding the substrate during cutting thereof by the saw, the chuck translatable in a horizontal direction and a transverse direction in relation to the saw.” Applicants assert that the Tieber reference contains no such identical description of the elements of the claimed invention whatsoever.

Therefore, presently amended independent claim 1 is allowable as well as dependent claims 2 through 7, 9, 10, and 12 therefrom.

35 U.S.C. § 103(a) Obviousness Rejections

Obviousness Rejection Based on Tieber (U.S. Patent 6,187,654) in view of Ishiwata et al. (U.S. Patent 6,102,023)

Claims 8 through 12 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Tieber (U.S. Patent 6,187,654) in view of Ishiwata et al. (U.S. Patent 6,102,023). Applicants respectfully traverse this rejection, as hereinafter set forth.

Applicants further assert that to establish a *prima facie* case of obviousness under 35 U.S.C. § 103 three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Third, the cited prior art reference must teach or suggest all of the claim limitations. Furthermore, the suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, and not based on Applicants' disclosure.

Applicants assert that any combination of the Tieber reference and the Ishiwata et al. reference does not and cannot establish a *prima facie* case of obviousness under 35 U.S.C. § 103 regarding the claimed invention of presently amended independent claim 1 because, at the least, any such combination fails to teach or suggest all of the claim limitations.

After carefully considering the cited prior art, the rejections, and the Examiner's comments, Applicants have amended the claimed invention to clearly distinguish over the cited prior art.

Turning to the cited prior art, the Tieber reference teaches or suggests an arrangement to support a substrate during a dicing process. The arrangement includes a nest having a first nest side and a second nest side. The nest includes a grid which defines at least one nest opening. The nest opening has an opening area that is smaller than an area of a die diced from the substrate. The arrangement further includes a vacuum retainer plate having thereon at least one vacuum pedestal. The vacuum pedestal protrudes above the first nest side of the nest when the vacuum pedestal is disposed through the nest opening from the second nest side to support the substrate on the upper surface and lift the substrate off the first nest side when the substrate is

positions on the nest with the first substrate side facing the first nest side and when the nest is mated with the vacuum retainer plate.

The Ishiwata et al. reference teaches or suggests a cutting apparatus comprising a chuck table for holding a workpiece, and first and second cutting apparatus each including a spinle unit having a blade attached thereto. The cutting apparatus are each movable above a stationary chuck.

Applicants assert that any combination of the Tieber reference and the Ishiwata et al. reference does not teach or suggest the claim limitations of presently amended independent claim 1 calling for “a support; a saw attached to the support, the saw having at least two blades supported above a table by the support and oriented to cut mutually parallel paths in a surface of a semiconductor substrate positioned on the table, at least one of the saw blades horizontally translatable on said support and the other saw blade having a fixed horizontal position on said support” and “a chuck having at least one cutting pedestal located thereon mounted on the table, the chuck for holding the substrate during cutting thereof by the saw, the chuck translatable in a horizontal direction and a transverse direction in relation to the saw.” Applicants assert that neither the Tieber reference nor the Ishiwata et al. reference, nor any combination of the Tieber reference and the Ishiwata et al. reference contains no such teachings or suggestions of the claim limitations the claimed invention whatsoever.

Therefore, presently amended independent claim 1 is allowable as well as dependent claims 2 through 7, 9, 10, and 12 therefrom.

Applicants submit that claims 1 through 7, 9, 10, and 12 are clearly allowable over the cited prior art.

Applicants request the allowance of claims 1 through 7, 9, 10, and 12 and the case passed for issue.

Respectfully submitted,



James R. Duzan
Registration No. 28,393
Attorney for Applicants
TRASKBRITT
P.O. Box 2550
Salt Lake City, Utah 84110-2550
Telephone: 801-532-1922

Date: October 10, 2005
JRD/dlm:lmh

Document in ProLaw